

Project # \_\_\_\_\_ Name of Student: \_\_\_\_\_ Total score out of 100: \_\_\_\_\_

Is the project worthy of 1<sup>st</sup> place? \_\_\_\_\_ Is the project worthy of Best in Show? \_\_\_\_\_ Judge's Initials: \_\_\_\_\_

**Grades 6-12 Science Fair Rubric Descriptors- Non Engineering- Circle your choice for each row for the 5 categories**

<b>Research</b>						
<b>Topic</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>a. Topic Idea is original/innovative</b>	Topic idea is extremely original and innovative.	Topic is innovative and original	Topic idea is moderately innovative	Topic is somewhat innovative.	Very little innovation	This topic has been done over and over again.
<b>b. Creative approach to solving the problem</b>	Researcher was very creative in his/her approach to solving the problem	Researcher demonstrated creativity in approach to problem solving	Researcher demonstrated moderate creativity in his/her approach to problem solving	Researcher was somewhat creative in his/her approach.	Researcher showed very little creativity	No creativity used in approach.
<b>c. Equipment and information services used resourcefully</b>	Student was extremely resourceful in using equipment and information services in the design of the project	Student was resourceful in using equipment and information services in the design of the project	Student was moderately resourceful in using equipment and information services in the design of the project	Student made use of some equipment and information services but could have been more resourceful.	Student used very little in the way of information resources or equipment.	No use of equipment or information services evident.
<b>d. Information in display is interesting</b>	Information is extremely interesting and informative. Wide range of charts, graphs, and pictorial representations found on the display.	Information in display is interesting & informative. Good use of charts, graphs, and pictorial representations found on the display.	Information moderately interesting/inform. Some charts and/or pictures found on display.	Somewhat interesting and informative. Either pictures or charts/graphs missing from display.	Very little interest or information provided. Charts, graphs, and pictures are scant at best.	No information provided in display
<b>e. Research helped answer question in creative way</b>	Very creative use of research to establish a conclusion.	Creative use of research to establish a conclusion.	Moderately creative use of research to establish a conclusion.	Marginal use of creativity in establishing the conclusion.	Very little creative use of research in establishing a conclusion.	No evidence of research found or research not related to question
<b>Scientific Thought</b>						
<b>Topic</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>a. Problem stated specifically and clearly</b>	Problem is both clear and specific. Use of higher level vocabulary is evident.	Problem statement is both clear and specific and vocabulary used was age- appropriate.	Problem is clear and specific but vocabulary was inadequate for the age level.	Problem statement is clearly communicated but lacks specificity	Problem statement is confusing and lacks specificity	Problem statement is missing

<b>b. Hypothesis clearly and specifically stated. Includes the why behind the expectation.</b>	Hypothesis was clear, specific and well-formulated. Researcher cited rationale behind hypothesis using appropriate vocabulary.	Hypothesis was clear, specific and well formulated with appropriate vocabulary. No rationale for hypothesis cited.	Hypothesis is clear and specific but vocabulary was inadequate for age level.	Hypothesis was clearly communicated but it lacked specificity.	Hypothesis is confusing and lacks specificity	No hypothesis
<b>c. Variables clearly recognized and defined</b>	Exceptional effort made to identify and control all variables. Correctly identified the independent, control, and dependent variable.	Independent, dependent, and control variables were identified. All variables were adequately controlled.	Most variables were identified and controlled.	Some variables were identified and controlled.	Very little identification or control of variables.	Variables were neither identified nor controlled.
<b>d. Procedures/ Explanation</b>	Detailed explanation of the procedure was given.	Adequate explanation of procedure	Procedure has a few gaps or errors in it but overall is acceptable.	Procedure has several glaring omissions or errors.	Procedure is very poorly done	No procedure provided or procedure is wrong.
<b>e. Data to support conclusions and limitation of data stated</b>	Multiple sources of data: Quality data found in well-developed graphs/charts/tables verify conclusion. Limitations of data were well explained.	Adequate data from multiple sources all support conclusion. No discussion of limitations of data.	Good data from one source but data not evident from multiple sources. Or Used multiple sources but some data did not support conclusion.	Data was collected from one source only and it does not support the conclusion.	Very little data provided.	No data provided or data is not relevant to the conclusion.
<b>F. Log Book provided Scientific Literature cited (other than the popular literature of magazines/newspapers)</b>	Detailed logbook provided. The logbook cites at least 5 or more references to <b>scientific literature</b> .	Detailed logbook. The logbook cites at least 4 references to <b>scientific literature</b> .	Log book is detailed but it has only 3 <b>scientific literature</b> references.	Log book provides only 2 <b>scientific literature</b> references.	Log book provides 1 reference to <b>scientific literature</b> .	No log book or no references to <b>scientific literature</b> cited.

### Thoroughness

Topic	5	4	3	2	1	0
<b>A .Thorough experiment</b> <ul style="list-style-type: none"> <li>• Purpose carried out to completion</li> <li>• Coverage of Problem</li> <li>• Conclusion based on multiple trials</li> </ul>	All 3 bullets were covered and special attention devoted to details.	All three bullets were adequately covered.	All three bullets were addressed but more detail was needed.	2 out of 3 bullets adequately covered	1 out of 3 bullets adequately covered.	None of the bullets were adequate

<b>b. Project Notes/Logbook Completeness and time</b>	Comprehensive and Detailed logbook provided confirms many hours spent on the project	Logbook is adequate and adequate time was devoted to the project.	Logbook lacks some important details but it is evident adequate time was spent on the project.	Logbook is missing key details. More work could have been devoted to the project	Logbook have very few entries and it is evident little time was spent on the project.	No logbook or project work to support work
<b>Skill</b>						
<b>Topic</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>a. Student conducts his own work in a suitable location (home, university, lab)</b>	It is evident the project is the work of the student and it was performed in an acceptable location.	It is evident the project is mostly the work of the student but it was performed in an acceptable location.	It is evident the project is only partially the work of the student and it was performed in an acceptable location.	It is evident the student contributed minimal work to the but it was performed in an acceptable location.	It is evident the project was NOT performed in an acceptable location and the student did little work on the project.	It is evident the project is NOT the work of the student or the project was conducted in an inappropriate setting.
<b>b. Appropriate equipment used skillfully and testing environment was valid. Appropriate number of trials conducted</b>	Appropriate equipment used skillfully (if applicable) and the testing environment was valid. Student conducted more than 3 trials during the experimentation.	Appropriate equipment used skillfully (if applicable) and the testing environment was valid. Student conducted 3 trials during the experimentation.	Appropriate equipment used skillfully (if applicable) and the testing environment was valid. Only 2 trials were conducted during the experiment	Appropriate equipment used skillfully (if applicable) in valid testing environment Only 1 trial was conducted during the experiment	Either appropriate equipment was not used skillfully or testing environment was not valid	No experimentation was conducted.
<b>Interview</b>						
<b>Topic</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>a. Conclusion relevant to hypothesis. Written material reflects understanding of research</b>	Student is very articulate in explaining conclusion and how it relates to the hypothesis. Interview backed by solid written research findings.	Based on the interview, it is evident the conclusion was adequately linked to the hypothesis. Adequate written research provided.	Most of the conclusion was adequately linked to the hypothesis and based on written research.	Some linkage of the conclusion to the hypothesis and some evidence of written research.	Conclusion was offered but was not linked to the hypothesis and little research was provided.	No conclusion was offered or student was very confused about the conclusion.
<b>b. Communication skills</b> <ul style="list-style-type: none"> <li>• Phases of project presented in orderly manner</li> <li>• Clear discussion of findings</li> <li>• Clear description of charts &amp; graphs</li> </ul>	Student excels in all 3 bulleted components of communication skills.	Student adequately communicates all 3 bullets	Student touches on all three bullets of communication skill but lacks details on one of these.	Student covers 2 of the 3 bullets adequately.	Student covers only one of the 3 bullets adequately.	Student is confused on all 3 of the bullets.

<b>c. Awareness</b> <ul style="list-style-type: none"> <li>• Other theories/approaches</li> <li>• Scientific literature in the field</li> </ul>	Student is very articulate in his/her ability to communicate awareness in both bullets.	Student is adequate in his/her ability to communicate awareness of both bullets.	Student can discuss some parts of each bullet but lacks important details.	Student can discuss one bullet adequately but is not familiar with the other bullet.	Student attempts some explanation but is very limited in his/her information.	Student is unable to discuss either bullet or is very confused about both bullets.
<b>d. New information acquired as a result of the project. Discussion of how the project can be revised or expanded in the future.</b>	Student is very articulate in his/her ability to discuss the new information acquired as a result of the project and can elaborate on ways to revise or expand the project in the future.	Student is able to adequately discuss the new information acquired as a result of the project and some ways to revise it in the future.	Student can discuss some of the new information acquired as a result of the project and some limited ways to revise it for the future.	Student is limited in his/her ability to discuss the new information acquired and unsure of ways to revise it for future use.	Student can discuss only a little of the new information acquired.	Student is unable to discuss the new information acquired or the student is very confused with the question.
<b>e. Student work ethic</b>	Based on the interview, it is virtually 100% evident that the student did the majority of the work on this project.	Based on the interview, it appears the student did the majority of the work on this project.	Based on the interview, it appears the student did some of the work but he/she had significant help.	Based on the interview, it appears the student had a great deal of help on the project.	Based on the interview, it appears the student did very little work on this project.	Based on the interview, it appears the student did not work on the project.

**Comments for student:**

Judge's Choice Recommendation (optional): \_\_\_\_\_